

MEMORY DEVICE AND METHOD HAVING BANKS OF DIFFERENT SIZES

## ABSTRACT OF THE DISCLOSURE

A memory device, such as a synchronous random access memory device, includes four banks of memory cells arranged in rows and columns. Different numbers of columns of memory cells are contained in each of the four banks. The bank in which an item of data are stored is determined by either the memory device, a memory controller or a processor based on one or more of several factors. For example, the bank in which the data are stored may be determined by the nature of the data or the length of data bursts written to or read from the memory device. Alternatively, the bank in which the data are stored may be determined based on the source of data written to the memory device or destination for data read from the memory device.